

NEW WORLD DISTRICT.

Plenty of Water and Vast Areas Covered With Timber for the Mine and Smelter.

While the Rest of Montana Was Parched, Here Were Gushing Streams.

The Lesson to be Learned From the Destruction of Forests—How Nature's Reservoirs are Preserved.

One of the features of this New World district is its extensive dense forests of pine, fir and spruce, with here and there a patch of aspens, willows or alders. From the tops of the mountains about Cook City one can see a vast area of mountains and valleys covered with dark thick forests, save the naked mountain peaks and here and there a small prairie on the mountain slopes and in the narrow valleys.

These forests continue for twenty miles to the west down Soda Butte creek, and for fifty miles along the mountain slopes to Bear creek, and for twenty miles north along the Snowy mountains and down the Stillwater and the Rose Bad, and for thirty miles east to Rocky Fork and Clark's Fork and south as far as vision extends over the head waters of Clark's Fork, and the east fork of the Yellowstone. Here we have a vast forest region covering an area of some 2,000 square miles, ample to furnish fuel and timber for the thousand mines which will be worked in this region. But the timber and the fuel are only a small part of the benefits these forests bestow upon this favored region. In the autumn of 1888, after the driest spring, summer and fall ever known in Montana, the mountains and valleys of this forest region were literally sparkling with cool springs and running streams.

The dry branches, which everywhere else told of failing water, and the early retreat of the miners from their placers and the herds of the stock men from their usual summer ranges, were not seen in this forest region.

As we rode over these lofty mountains and along these deep valleys in the grateful shade of the whispering pines and not ed everywhere the gushing fountains and the sparkling streams, which invited us and our ponies to the most refreshing of all drinks, we could but remember the ancient Chinese proverb—"The mighty rivers are cradled in the leaves of the mountain pine." This is true in Asia, true in Africa, true in Europe and true in America. Wherever the mountain pines have been permitted to grow where the Great God planted them, the small fountains and the great rivers have continued to flow and make the lands fruitful. But where the axe has swept away these forests the springs have dried up and the streams have left dry beds and the lands are covered with drifting sands, as is seen in Mesopotamia, Palestine and northern Africa, once the most fertile region of the world.

But how is it that these pine leaves feed the springs and mountain streams and thus "cradle the mighty rivers?"

It is well known that the leaves of the pines, as well as the leaves of all other living plants, constantly give off into the air vapor of water. This vapor helps to form the clouds which so constantly appear on the mountains, and there furnish the frequent rains and snows so well known and ever expected in these regions. These rains and snows help keep up the springs and streams that feed the rivers.

24—These pines shed large quantities of leaves and twigs and cones every year, which cover the ground and keep it moist and cool by preventing the evaporation of the moisture.

31—This mulch of leaves and twigs and cones keep the ground cool and moist and promotes the growth of mosses and lichens and grasses, greatly increasing the surface mulch, which like a thick carpet of sponges, holds the waters and gives them up gradually and keeps up the springs and streams and nighty rivers.

This spongy coating of leaves and twigs and cones and lichens and moss and grasses, vary in thickness from the fraction of an inch to several feet, as shown where fires have burned it up and exposed the logs and rocks it had covered.

In these forests the snow falls in great quantities, and in spring the warm winds melt these rapidly, but the waters instead of running off and producing destructive floods are absorbed by the spongy carpet of leaves and held as in reservoirs, which gradually yield them up to keep up the springs and streams through the long dry summer and autumn.

This is nature's reservoir, spread everywhere under the forests to catch the waters of every mountain side and valley, and to hold it for the dry seasons to follow. And this reservoir built by the Great Engineer of the universe, has no defects. It is built of tiny leaves, brittle twigs, flexible mosses, slender grasses and microscopic lichens, and yet it is stronger than the walls of vast granite blocks tied and cemented by the rules of science. It never bursts and produces such floods as once carried ruin down the Ten-Mile and devastation and death to Johnstown.

In Florida and Louisiana it may be a pleasant sight to see the effects of the woodman's axe on the forests and the planters' fires upon the jungle, letting the sunshine in upon the reeking soil; but in Montana the woodman's axe destroys nature's reservoirs, and makes our mountains and hills barren wastes and fruitful sources of ruinous floods, when the waters of melting snows and storms all sweep down to the valleys, leaving but little in the naked soil to supply the springs and streams which soon run dry. If one would see the difference let him visit Cook City and feast his eyes with the glorious forests and the perennial fountains on every hill side and the sparkling streams in every ravine and valley, and then come back to Helena and see our mountains, once clothed with grand old forests and native reservoirs, but now hideous with blackened stumps and naked soils, dry gravels and pebbly channels, where, before the axe, the waters of the natural reservoirs, springs, rushes and streams flowed to quench the thirst of the miner and wash his golden sands. And now all Helena pants for Woolston's bed-rock water from the swamps of the Ten Mile.

But the natural reservoirs have been destroyed with the forests around Helena. Our engineers have done their best to fill their place with the artificial ponds their skill has invented. All can see how poorly these inventions supply the place of the natural reservoirs built by the Great Architect.

The whole world outside of America has learned the sad lesson that forests destroyed means disastrous floods, distressing droughts, failing fountains, dry streams and barren soils as shown by the late floods from the Pyrenees in France, which swept away her ancient cities, and the floods of China which have devastated whole provinces, drowned hundred of thousands and left ten million people without homes and food and the means of support.

The nations built reservoirs as early as Solomon's time, which gave temporary relief, but their fountains have failed, their reservoirs are dry and even Solomon's fruitful fields and glorious gardens are now barren wastes.

But modern Europe has learned better. The woodman's axe is followed by the for-

ester's spade. For every tree cut three new ones are planted. Government help in building reservoirs will be a temporary aid to our miners and farmers; but while the government under takes to hold and manage our forests, something should be done to supply the destruction made by the wood-chopper, the lumberman, the coal burner and the forest fires.

Nowhere can forests be renewed and increased so easily as here. Young pines and firs by the million spring up in the wake of every fire and wood-chopper. A part of these young trees could easily be transplanted to unoccupied places in the mountains and foothills. Such a work would make the future of our mountain country more hopeful and secure the working of our mines for the next thousand years.

But you say trees transplanted will die without water. So will the plants die without water, which cover our mountains every springtime with their carpet of flowers. But these plants utilize the waters as they drop from the melting snow. They spring up and bloom just below the snow line and sometimes even through the snow. They follow the snow line as it melts and retreats up the mountain sides every spring, utilizing the water to feed its bloom and ripen its seed.

The tree-planter might know as much as the violets and the anemone, and follow up the snow line and plant his trees where the ground is wet under every log and beside every rock where the moisture lingers latest.

By this following of the flowers, the tree planter's season will last from March on the foot-hills till August in the high mountains. The anemone blooms all the way from March to July—March on the foot-hills, July on the alpine summits.

Let us be wise according to our best lights. Let those who believe in God follow his plans for supplying the springs and rivers by forests and those of us who believe in evolution, follow the plan evolved by the laws of nature to supply the waters needed in our homes, our factories, our mines and our farms, then all will work together in harmony, preserving and replenishing our forests.

G. C. SWALLOW.

LEGAL NOTICES.

SUMMONS IN THE DISTRICT COURT OF the First Judicial District of the Territory of Montana in and for the county of Lewis and Clark.

John A. Carbis, plaintiff, vs. Michael J. Carbis, defendant.

The people of the Territory of Montana send greeting to the above named defendant. You are hereby required to appear in an action brought against you by the above named plaintiff in the District Court of the First Judicial District of the Territory of Montana in and for the county of Lewis and Clark, and to answer the complaint filed therein, within ten days (exclusive of the day of service) after the service upon you of this summons, if served within this county; or, if served out of this county, but in this district, within twenty days; otherwise within forty days, or judgment by default will be taken against you, according to the prayer of said complaint.

The said action is brought to secure judgment against you for the sum of seventeen hundred and forty-two dollars and sixty cents, claimed to be due on a certain promissory note given by you to the plaintiff, which note bears date May 12, 1889, and interest thereon and the costs of this action. And you are hereby notified that if you fail to appear and answer the said complaint, as above required, the said plaintiff will take judgment against you for the sum demanded in the complaint, to-wit: \$1742.50, interest and costs thereon, (given under my hand and the seal of the District Court of the First Judicial District of the Territory of Montana in and for the county of Lewis and Clark, this fifth day of November, in the year of our Lord one thousand eight hundred and eighty nine.

(SEAL.) W. F. PARKER, Clerk.

A. C. Botkin and George F. Shelton, attorneys for plaintiff.

DISSOLUTION—THE FIRM OF HILL & HAMMILL is this day dissolved by mutual consent. Mr. Hill continues business as he now stand, who will pay and collect any and all bills. Dated Helena, Mont., Nov. 5, 1889.

E. HAMMILL. Q. L. HILL. NOTICE TO CREDITORS—ESTATE OF Thomas S. Marshall, deceased. Notice is hereby given by the undersigned, administratrix of the estate of Thomas S. Marshall, deceased, to the creditors of, and all persons having claims against the said deceased, to exhibit them with the necessary vouchers, within four months after the first publication of this notice, to the said administratrix, at the office of A. C. Botkin, city of Helena, county of Lewis and Clark, Montana territory, the same being the place for the transaction of the business of said estate, in the county of Lewis and Clark.

SARAH E. MARSHALL, Administratrix of the estate of Thomas S. Marshall, deceased. First publication, Oct. 30, 1889.

NOTICE OF STOCKHOLDERS' MEETING—Notice is hereby given that a meeting of the stockholders of the Minah Consolidated Mining company will be held on the fifth day of November, A. D. 1889, at 3 o'clock p. m. of said day, at the office of the company in Masonic block, in the city of Helena, Lewis and Clark county, Montana territory, for the purpose of electing five trustees of the company for the ensuing year.

Oct. 21, 1889. J. O. BRISCOE, Pres. NOTICE TO CONTRACTORS.—SEALED proposals will be received by the building committee for the excavations and foundation of the new Presbyterian church according to plans and specifications to be seen at the First National bank. Proposals may be left with or addressed to T. H. Kleinschmidt of the committee up to Nov. 8, 1889. The committee reserve the right to reject any or all bids. By order of the committee, D. H. CUTBERT, Secretary.

NOTICE OF DISSOLUTION OF PARTNERSHIP—Notice is hereby given that the co-partnership heretofore existing between the undersigned under the firm name and style of C. H. Wood & Co. at Helena, Montana, is this day dissolved by mutual consent. Mr. C. H. Wood retiring. Mr. John Hardwick will pay all outstanding liabilities of the firm and is authorized to collect and receipt for all accounts due said firm.

C. H. WOOD. J. H. HARDWICK. Dated Helena, Mont., Nov. 2, 1889.

DISSOLUTION NOTICE—THE CO-PARTNERSHIP firm of Deun & Hayes at the Trianae saloon on Helena avenue, opposite the Northern Pacific depot, has this day been dissolved by mutual consent. Mr. John Deun retiring. Mr. M. T. Hayes will continue the business at the old stand, and will pay all partnership indebtedness and collect all debts due to the late firm.

M. T. HAYES. JOHN DEUN. I recommend our successor, M. T. Hayes, to the favorable consideration of the patrons of the late firm of Deun & Hayes and to my personal friends.

JOHN DEUN.

HELENA



Corner Main Street and Sixth Avenue.

A School of Thorough Practical Business Training.

Bookkeeping, Arithmetic, Penmanship, Banking, Business and Local Correspondence, Spelling and all the English Branches.

Perin Phonography By Mail.

A Full Corps of Experienced Teachers, Day and Evening Sessions. For Particulars Read "Business Educator," or Address

H. T. ENGLEHORN, A. M., Principal and Proprietor, Helena, Montana.

THE NEW YORK DRY GOODS STORE

FOR WINTER.

QUANTITY AND QUALITY!

NEW GOODS OF MARVELLOUS BEAUTY!
CARPETS! CARPETS! CARPETS!

CARPETS,
CARPETS,
CARPETS,
CARPETS.

Particular Attention is Called to our New Line of Moquettes, Brussels, Tapestry and Art Ingrains in Original Designs and Special Colorings. Napier Mating Oil Cloths, Linoleums, Smyrna Rugs, Brush Mats, Hemp Matting and Window Shades in Great Variety.

CARPETS,
CARPETS,
CARPETS,
CARPETS.

LACE CURTAINS--PORTIERS!

Genuine Madras Lace Curtains, Brussels Point Lace Curtains, Tambor Lace Curtains, Cluny Lace Curtains, Irish Point Lace Curtains, Draperies and Portieres in All Known Qualities and Artistic Patterns.

FURS, FURS! SECOND SHIPMENT FURS, FURS!

In Natural Lynx, Russian Fitch, Siberian Squirrel, Opossum, Monkey, Seal and Beaver---A CHARMING SELECTION.

DRESS GOODS DEPARTMENT!

It don't take half a glance to tell where the Finest and Largest lines of Dress Goods are. About everything that can be asked for is here. We have the stock. We give the Value.

Special Offerings This Week in Ladies' Scarlet Underwear!

AGENTS FOR FOSTER'S CELEBRATED LACE KID GLOVES!

ALL GOODS ARE SOLD AT NEW YORK PRICES!

Out of Town orders Promptly Filled. Satisfaction Guaranteed.

NEW YORK DRY GOODS STORE,

Corner Bridge and Main Streets.

Helena, Montana.

INTERNATIONAL HOTEL.

The Largest Leading Hotel! Has the very best accommodations in the city. Rates reduced; \$2 per day and upwards, according to location of rooms.

M. LISSNER, Proprietor.

COSMOPOLITAN HOTEL.

HELENA, MONTANA. SCHWAB & ZIMMERMAN, Proprietors.

The Oldest, Most Desirable Leading First-Class Hotel in the City.

JAS. McMILLAN & CO.,

MINNEAPOLIS SHEEPSKIN TANNERY,

Hides, Sheep Pelts, Wool, Tallow, Ginseng and Seneca Root. Sheep Pelts and Furs a Specialty.

101, 103 & 105 Second St. North. Minneapolis, Minn. Shipments Solicited. Write for Circulars.

U. S. PUBLIC SAMPLING COMPANY.

City Office Removed to Second National Bank.

Samples and Assays made of All Ores. Consignment solicited. Samples of each lot submitted to the different Smelters, and the Ore Sold to the Highest Bidder. Sampling Works at Northern Pacific and Montana Central Railroad Junction. Take Motor Line.

WRITE FOR TERMS. TELEPHONE NO. 71.

THE METROPOLITAN.

Formerly Sparey's Hotel.

Run on Both American and European Plans. Sample Rooms for Traveling Men.

Mrs. T. H. MORSE, Proprietress, PHILIPSBURG, MONTANA.

THE ROCKY FORK COAL COMPANY

Is now prepared to deliver Coal from its Mines at

RED LODGE

To consumers in this City. For Domestic and Steam purposes Rocky Fork Coal has no superior in this market. It lights readily, makes Hot Fire and leaves little ash. Try it.

Principal Office: ROOM 25, PITTSBURG BLOCK.

AGENCIES:

Helena.	ESTES, CONNELL Co.,	Anaconda.
Deer Lodge.	A. FRASER,	Billings.
Butte.	GEO. T. YOUNG,	Livingston.
O. E. MILLIS,	Park City.	Townsend.
BURSA & BAILEY,	Big Timber.	Stillwater.
L. S. HOLLIER,	Bozeman.	

R. W. NEILL,

Manufacturer and Dealer in

Stock Saddles, Side Saddles, Light and Heavy Harness,

Bits, Spurs, Quirts, Whips, Lashes, Blankets, Sheets, Dusters, Slickers, Nose-Bags, Sweat Collars, Horse Boots, and all other goods usually kept in a first-class harness store. Hand made driving harness a specialty.

Opposite Grand Central Hotel, Main Street, HELENA, MONT.

FOR FALL AND WINTER. JUST RECEIVED.

A Large stock of Imported and Domestic Suitings, Overcoatings, Trouserings and Fancy Vestings, which I am prepared to make up on Shortest Notice. Good Workmanship and stylish Fit Guaranteed. Call and get my prices before purchasing elsewhere.

GEO. SCHILLER,

MERCHANT TAILOR, NO. 13 PARK AVENUE.

WOOLDRIDGE HOTEL!

(Penn Block, Corner Main Street--Opposite International.)

Everything New and First Class. Steam Heat and Elevator.

RATES: FROM \$1 TO \$2 PER DAY.

The Neatest Place in Helena, and Good Accommodations: Street Cars to and from all Depots, and FARE PAID TO HOTEL.